FIG. 1

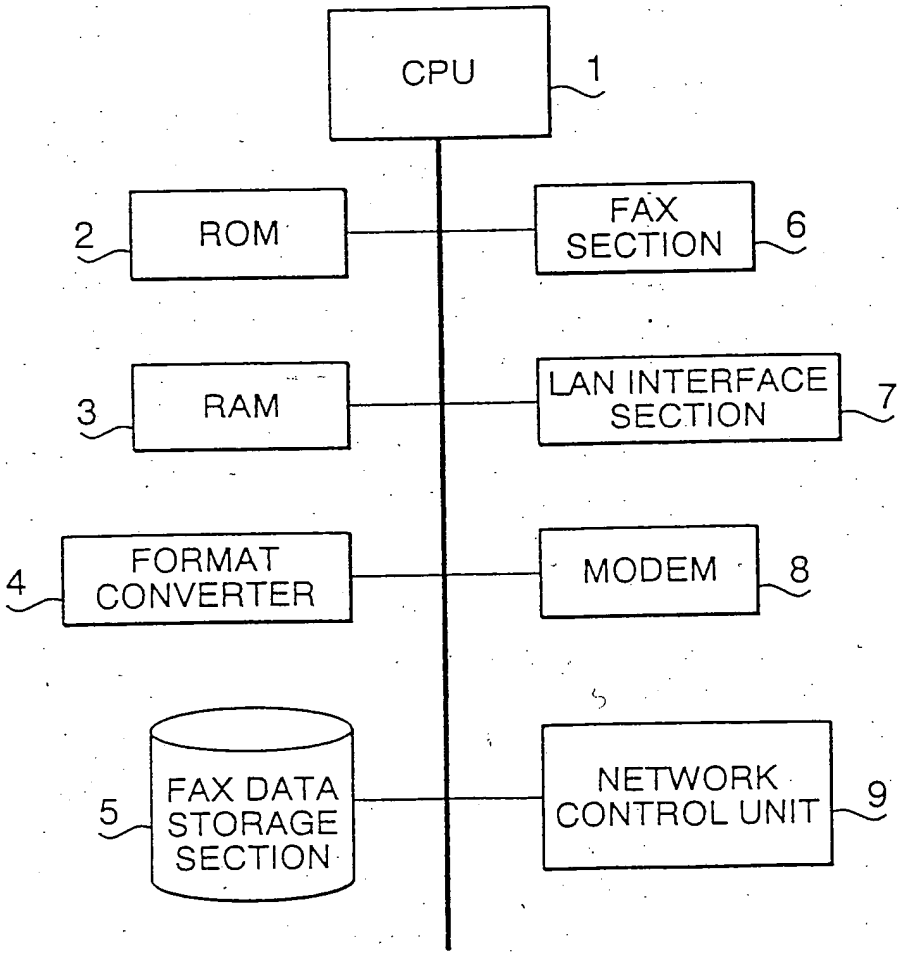

CPU
1
2
ROM
FAX SECTION
6
3
RAM
LAN INTERFACE SECTION
7
4
FORMAT CONVERTER
MODEM
8
5
FAX DATA STORAGE SECTION
NETWORK CONTROL UNIT
9

FIG. 2

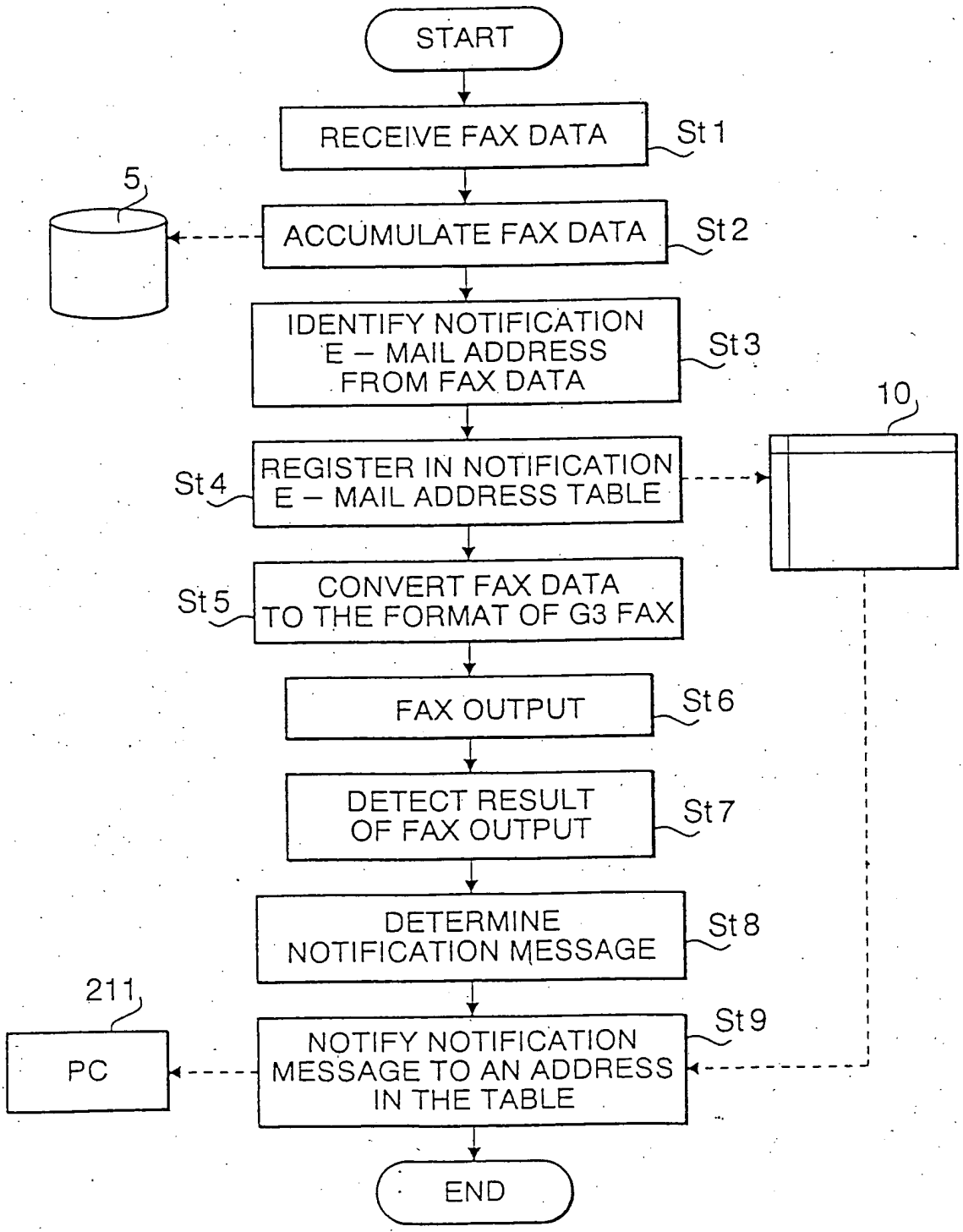

START
RECEIVE FAX DATA
St1
5
ACCUMULATE FAX DATA
St2
IDENTIFY NOTIFICATION E – MAIL ADDRESS FROM FAX DATA
St3
10
St4
REGISTER IN NOTIFICATION E – MAIL ADDRESS TABLE
St5
CONVERT FAX DATA TO THE FORMAT OF G3 FAX
FAX OUTPUT
St6
DETECT RESULT OF FAX OUTPUT
St7
DETERMINE NOTIFICATION MESSAGE
St8
211
PC
NOTIFY NOTIFICATION MESSAGE TO AN ADDRESS IN THE TABLE
St9
END

FIG. 3

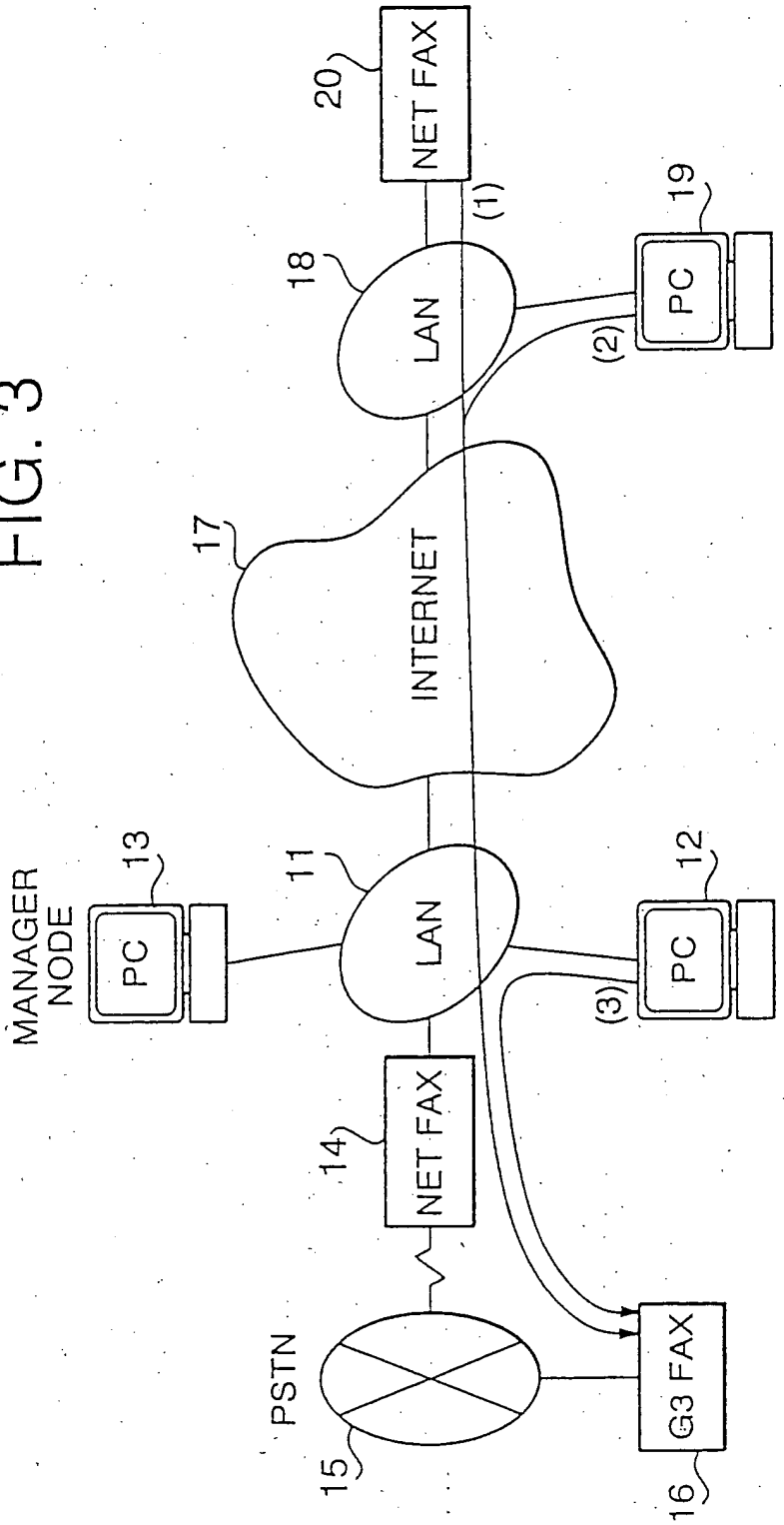

MANAGER NODE
PC
13
11
LAN
12
PC
(3)
14
NET FAX
PSTN
15
G3 FAX
16
17
INTERNET
18
LAN
20
NET FAX
(1)
19
PC
(2)

FIG. 4

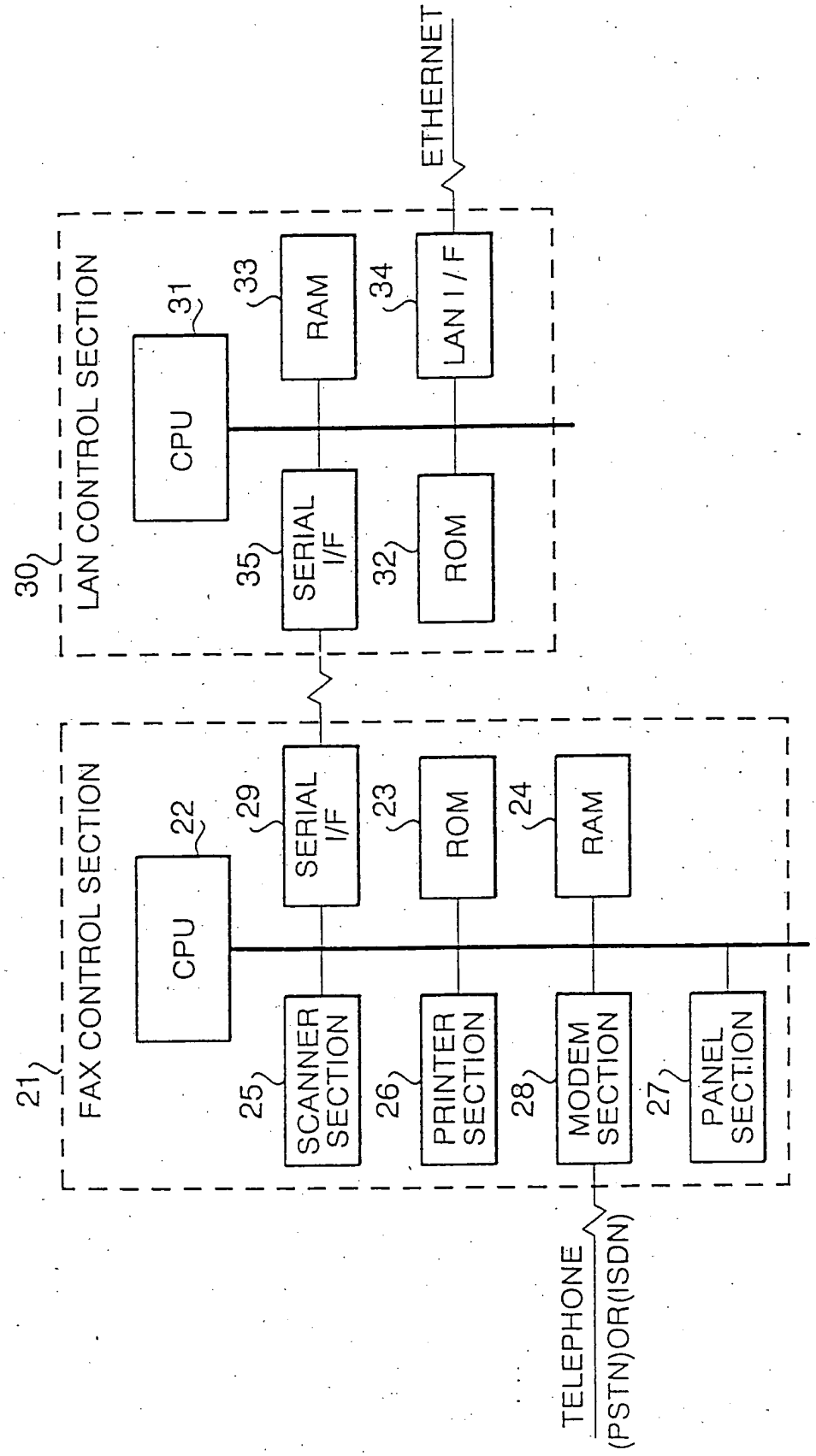

ETHERNET
LAN CONTROL SECTION
30
CPU
31
RAM
33
LAN I/F
34
SERIAL I/F
35
ROM
32
FAX CONTROL SECTION
21
CPU
22
SERIAL I/F
29
ROM
23
RAM
24
SCANNER SECTION
25
PRINTER SECTION
26
MODEM SECTION
28
PANEL SECTION
27
TELEPHONE (PSTN)OR(ISDN)

FIG. 5

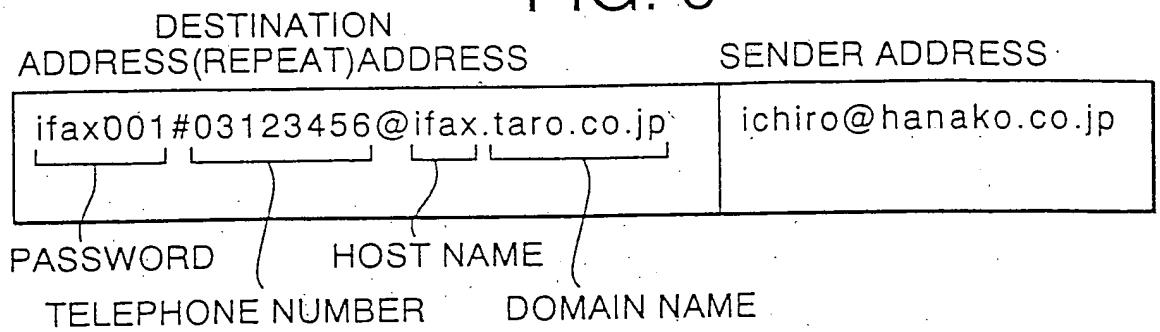


FIG. 6

DESTINATION ADDRESS(REPEAT)ADDRESS	SENDER ADDRESS
INTERNET FAX@DOMAIN NAME	

FIG. 7

NUMBERS	DOMAIN NAMES	PASSWORDS
1	hanako.co.jp	ifax001
2	mgcs.co.jp	ifax002
3	mei.co.jp	ipc
4	• • •	• • •
5	• • •	• • •
6	• • •	• • •
7	• • •	• • •
8	• • •	• • •
9	• • •	• • •
10	• • •	• • •

FIG. 8

DESTINATION TELEPHONE NUMBER	SENDER ADDRESS
0312345678	ichiro@hanako.co.jp

FIG. 9

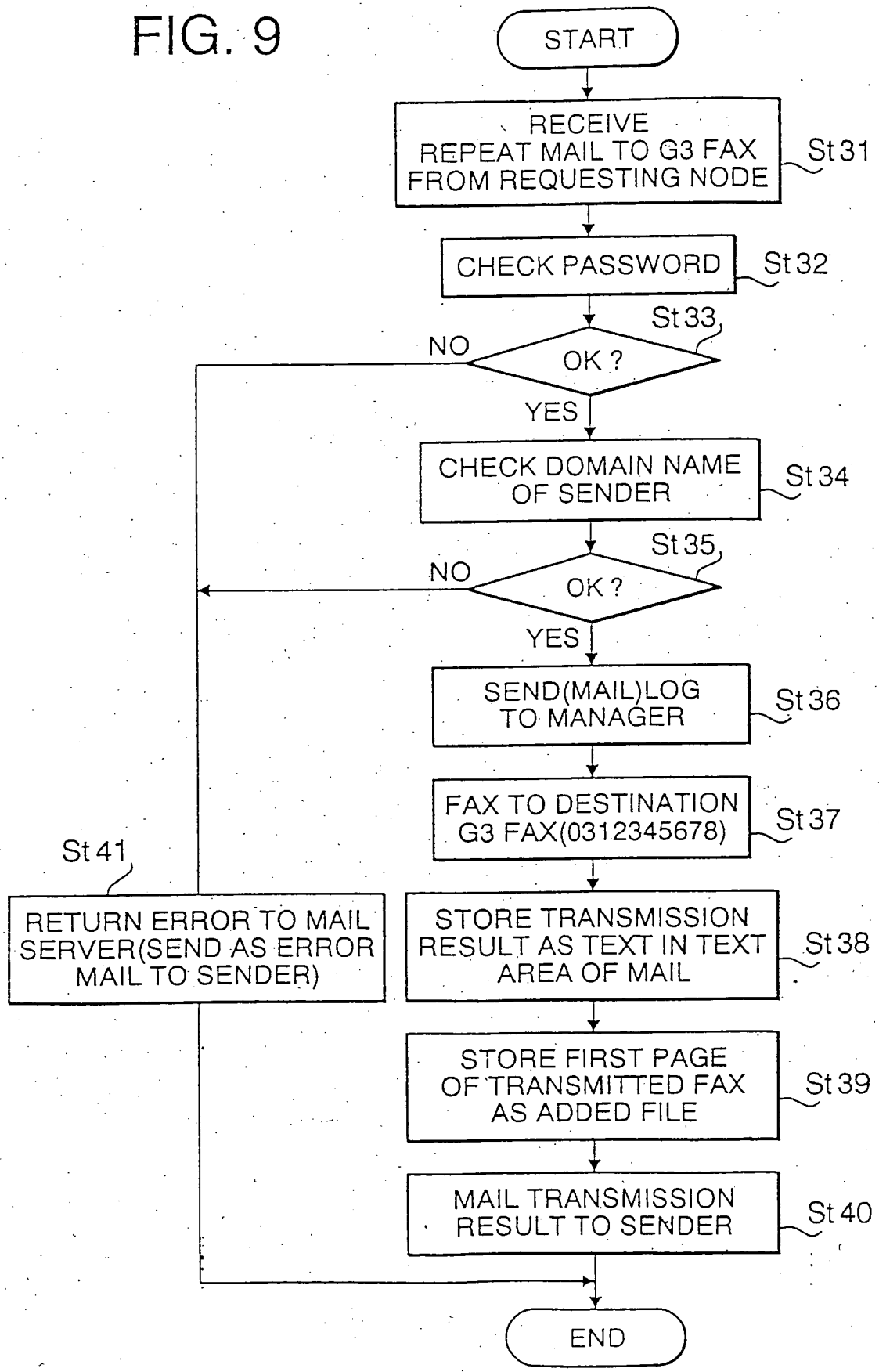

START
RECEIVE REPEAT MAIL TO G3 FAX FROM REQUESTING NODE
St31
CHECK PASSWORD
St32
St33
NO
OK ?
YES
CHECK DOMAIN NAME OF SENDER
St34
St35
NO
OK ?
YES
SEND(MAIL)LOG TO MANAGER
St36
FAX TO DESTINATION G3 FAX(0312345678)
St37
St41
RETURN ERROR TO MAIL SERVER(SEND AS ERROR MAIL TO SENDER)
STORE TRANSMISSION RESULT AS TEXT IN TEXT AREA OF MAIL
St38
STORE FIRST PAGE OF TRANSMITTED FAX AS ADDED FILE
St39
MAIL TRANSMISSION RESULT TO SENDER
St40
END

FIG. 10

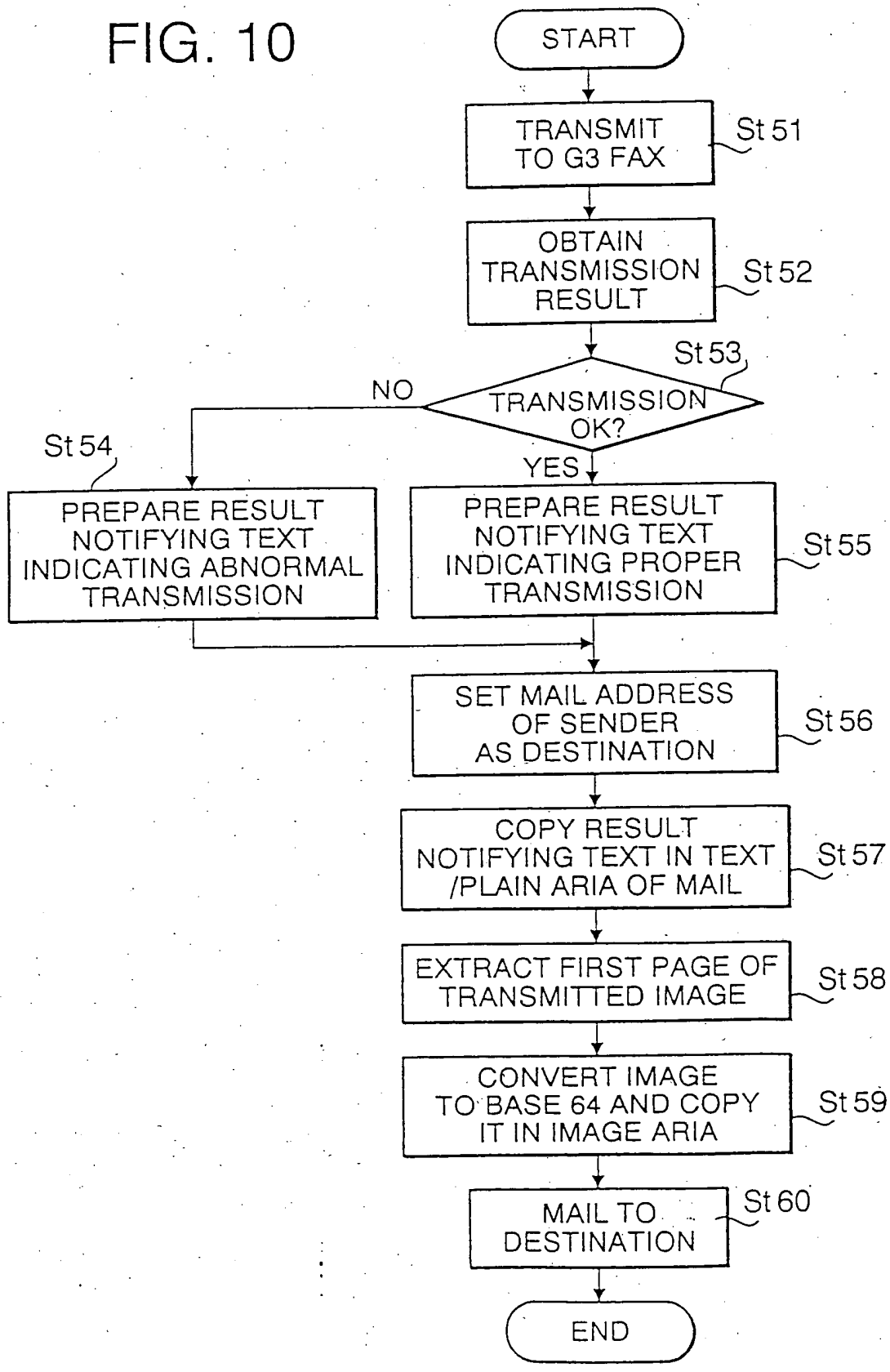
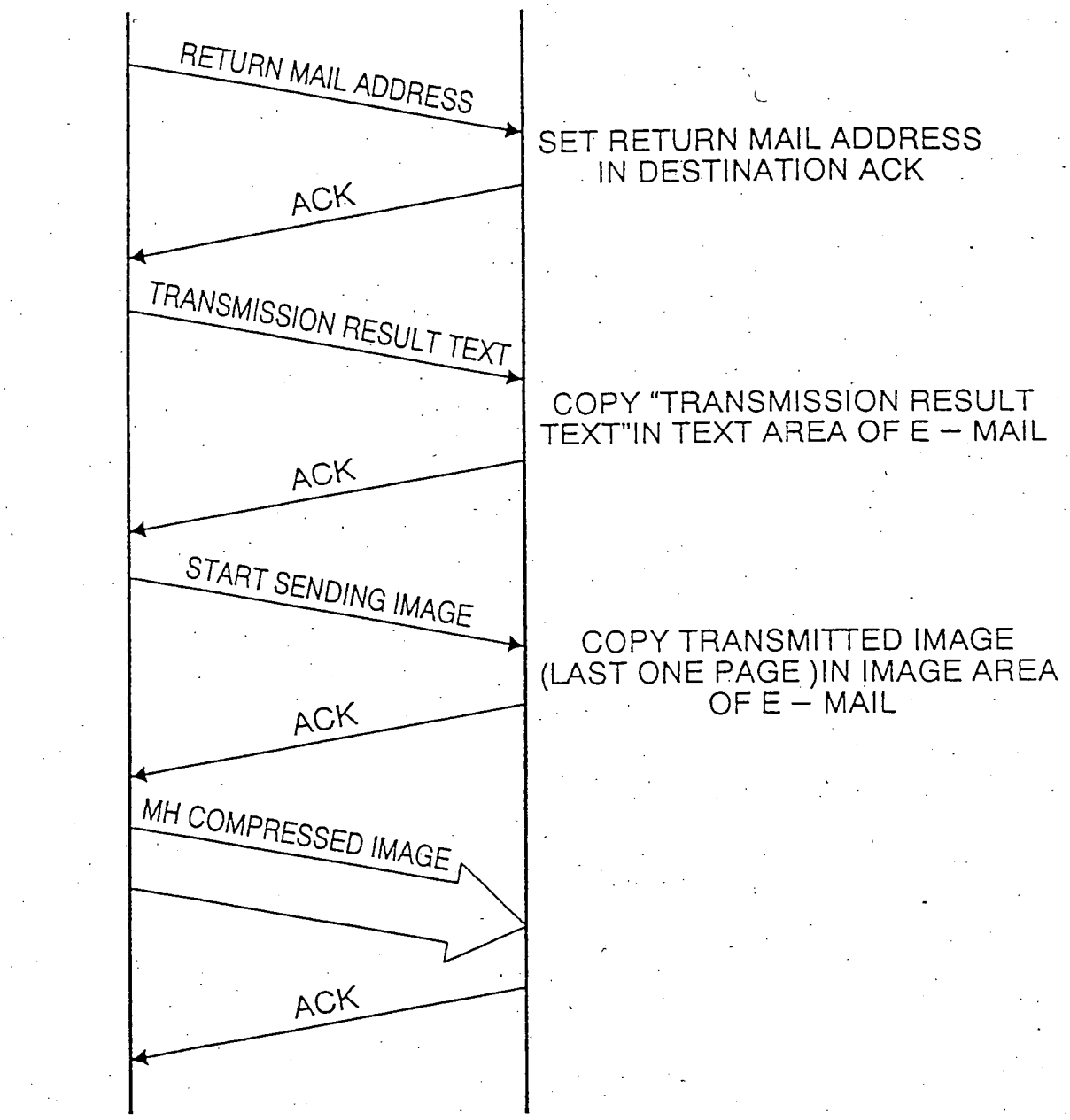

START
TRANSMIT TO G3 FAX
St 51
OBTAIN TRANSMISSION RESULT
St 52
St 53
TRANSMISSION OK?
NO
YES
St 54
PREPARE RESULT NOTIFYING TEXT INDICATING ABNORMAL TRANSMISSION
PREPARE RESULT NOTIFYING TEXT INDICATING PROPER TRANSMISSION
St 55
SET MAIL ADDRESS OF SENDER AS DESTINATION
St 56
COPY RESULT NOTIFYING TEXT IN TEXT /PLAIN ARIA OF MAIL
St 57
EXTRACT FIRST PAGE OF TRANSMITTED IMAGE
St 58
CONVERT IMAGE TO BASE 64 AND COPY IT IN IMAGE ARIA
St 59
MAIL TO DESTINATION
St 60
END

FIG. 11



SEQUENCE FOR EXCHANGING TRANSMISSION RESULT BETWEEN CONTROL SECTIONS

FIG. 12

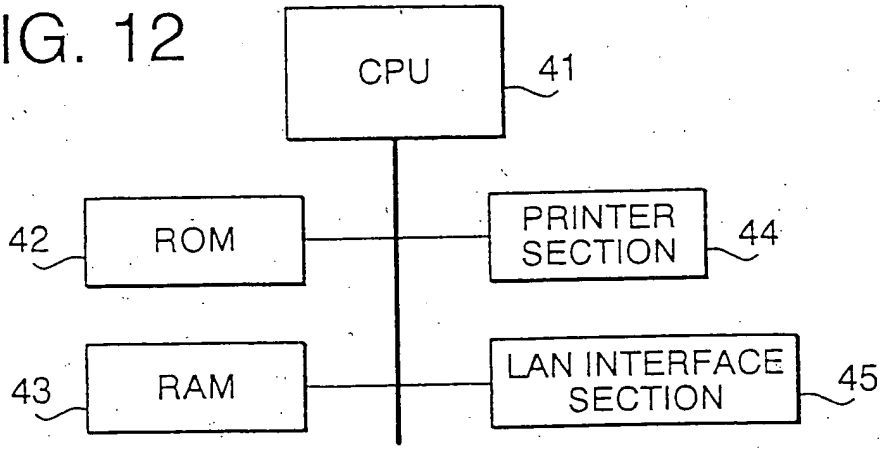

CPU
41
42
ROM
PRINTER SECTION
44
43
RAM
LAN INTERFACE SECTION
45

FIG. 13

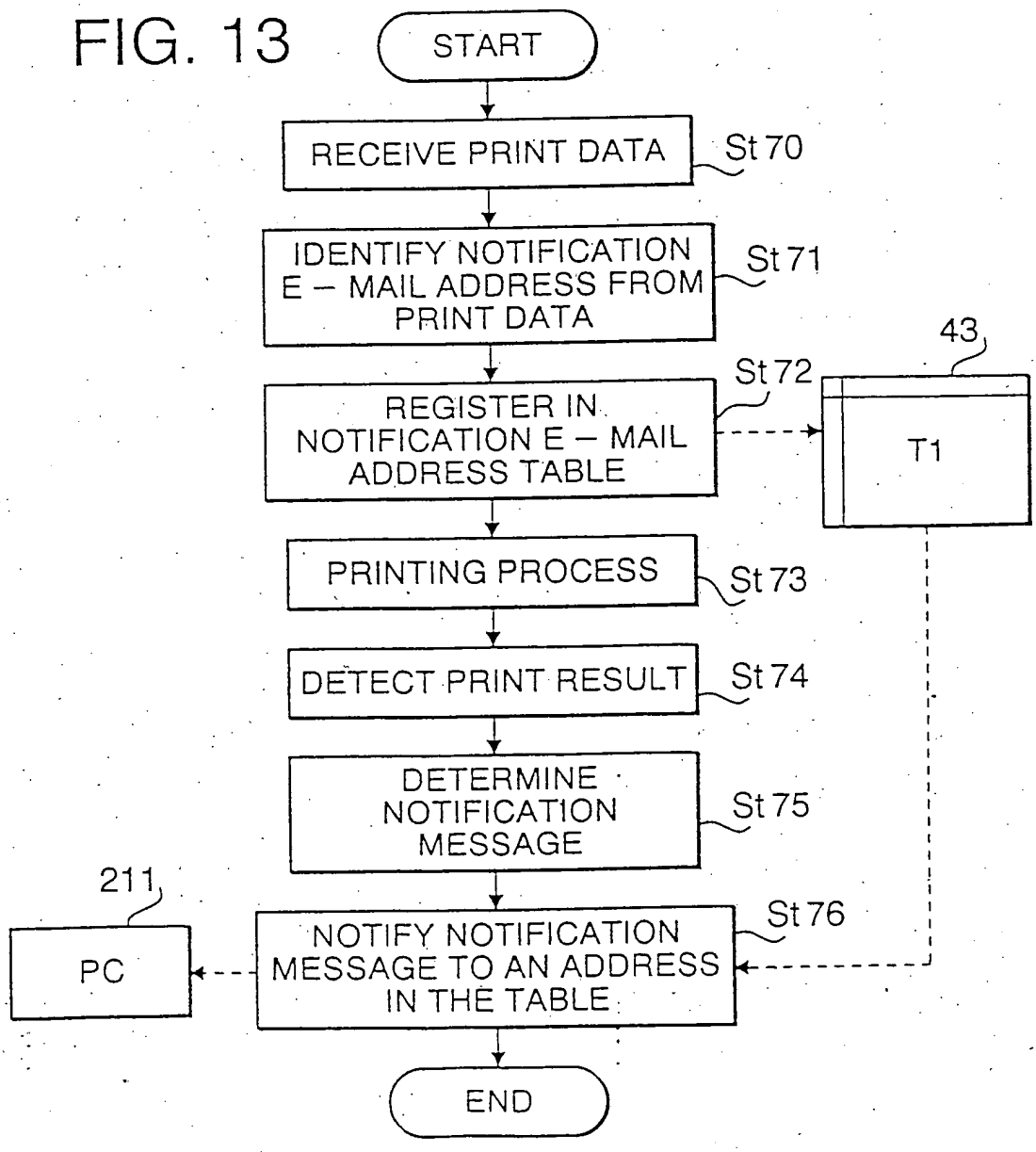

START
RECEIVE PRINT DATA
St 70
IDENTIFY NOTIFICATION E – MAIL ADDRESS FROM PRINT DATA
St 71
43
St 72
REGISTER IN NOTIFICATION E – MAIL ADDRESS TABLE
T1
PRINTING PROCESS
St 73
DETECT PRINT RESULT
St 74
DETERMINE NOTIFICATION MESSAGE
St 75
211
St 76
PC
NOTIFY NOTIFICATION MESSAGE TO AN ADDRESS IN THE TABLE
END

FIG. 14

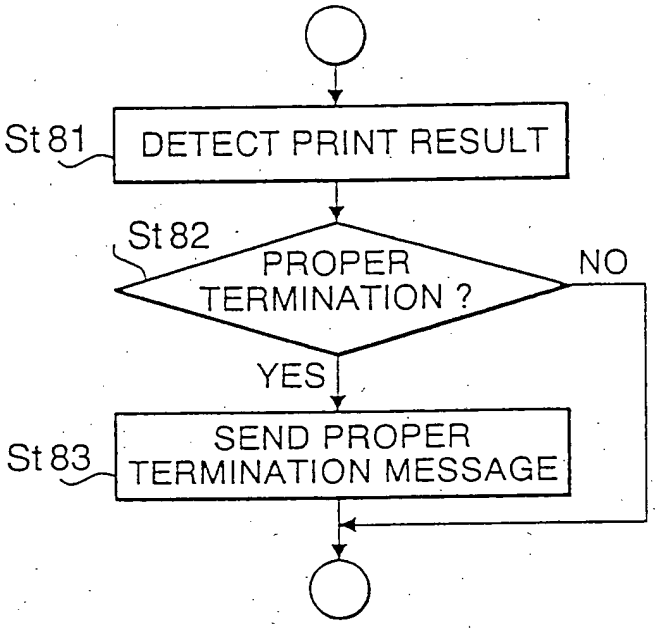

St 81
DETECT PRINT RESULT
St 82
PROPER TERMINATION ?
NO
YES
St 83
SEND PROPER TERMINATION MESSAGE

FIG. 15

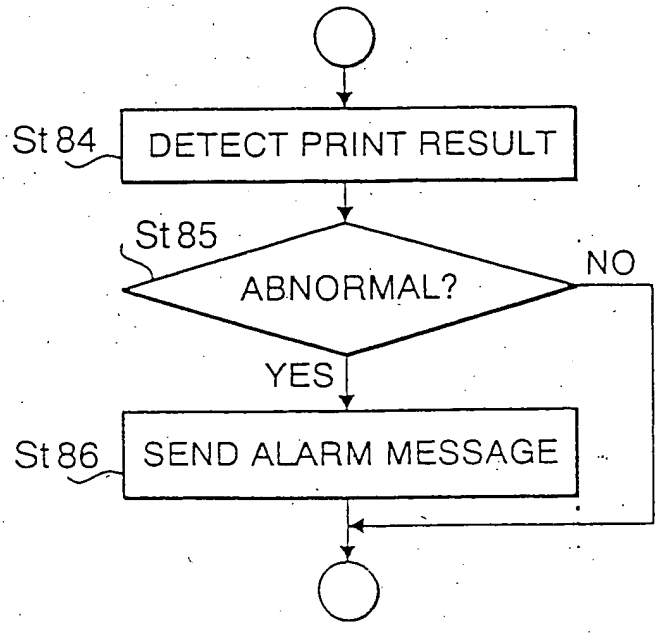

St 84
DETECT PRINT RESULT
St 85
ABNORMAL?
NO
YES
St 86
SEND ALARM MESSAGE

FIG. 16

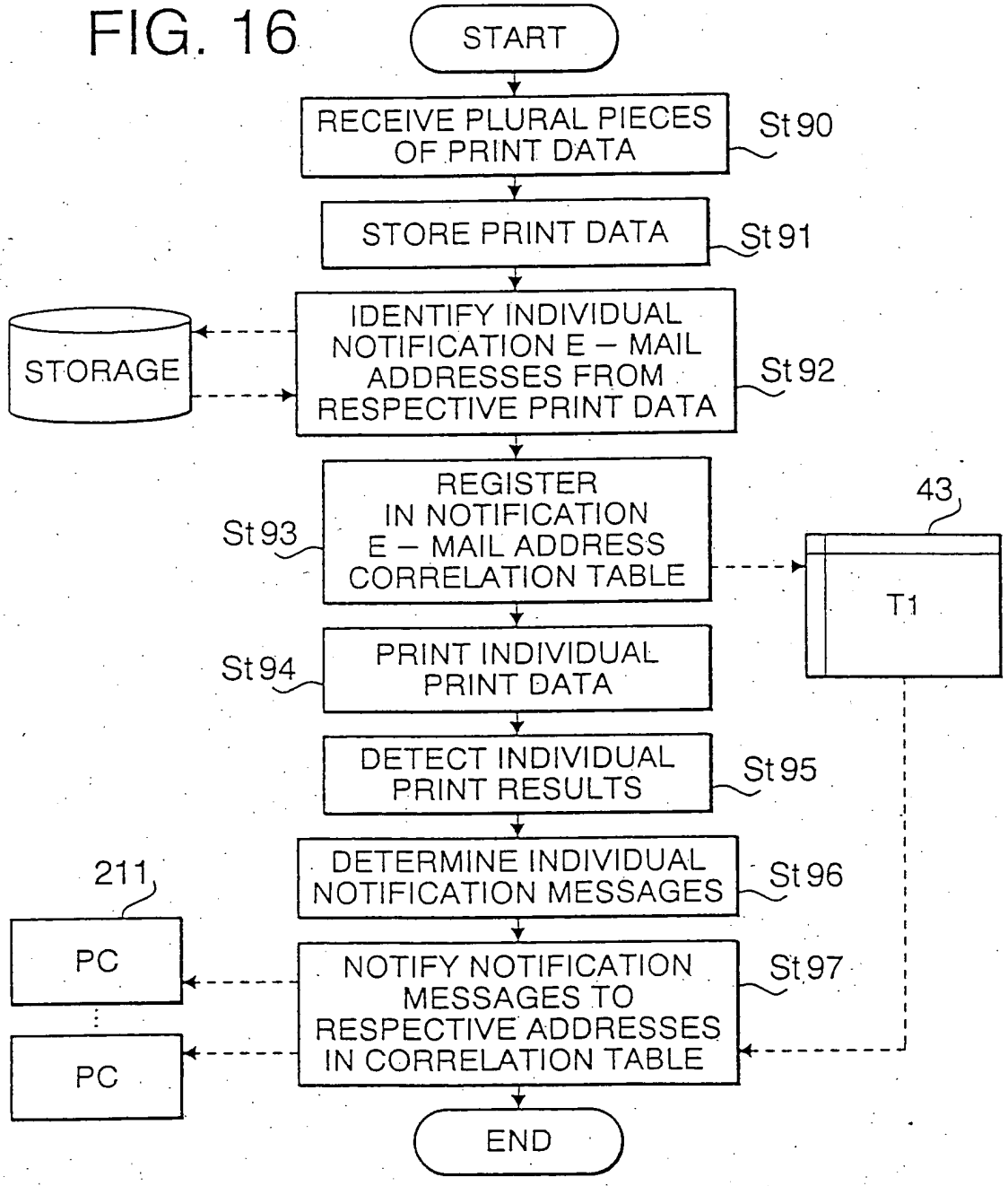


FIG. 17

RECEPTION NUMBERS	NOTIFICATION E – MAIL ADDRESSES
1	123. 456. 789. 00
2	101. 202. 303. 44
⋮	⋮
n	n

FIG. 18

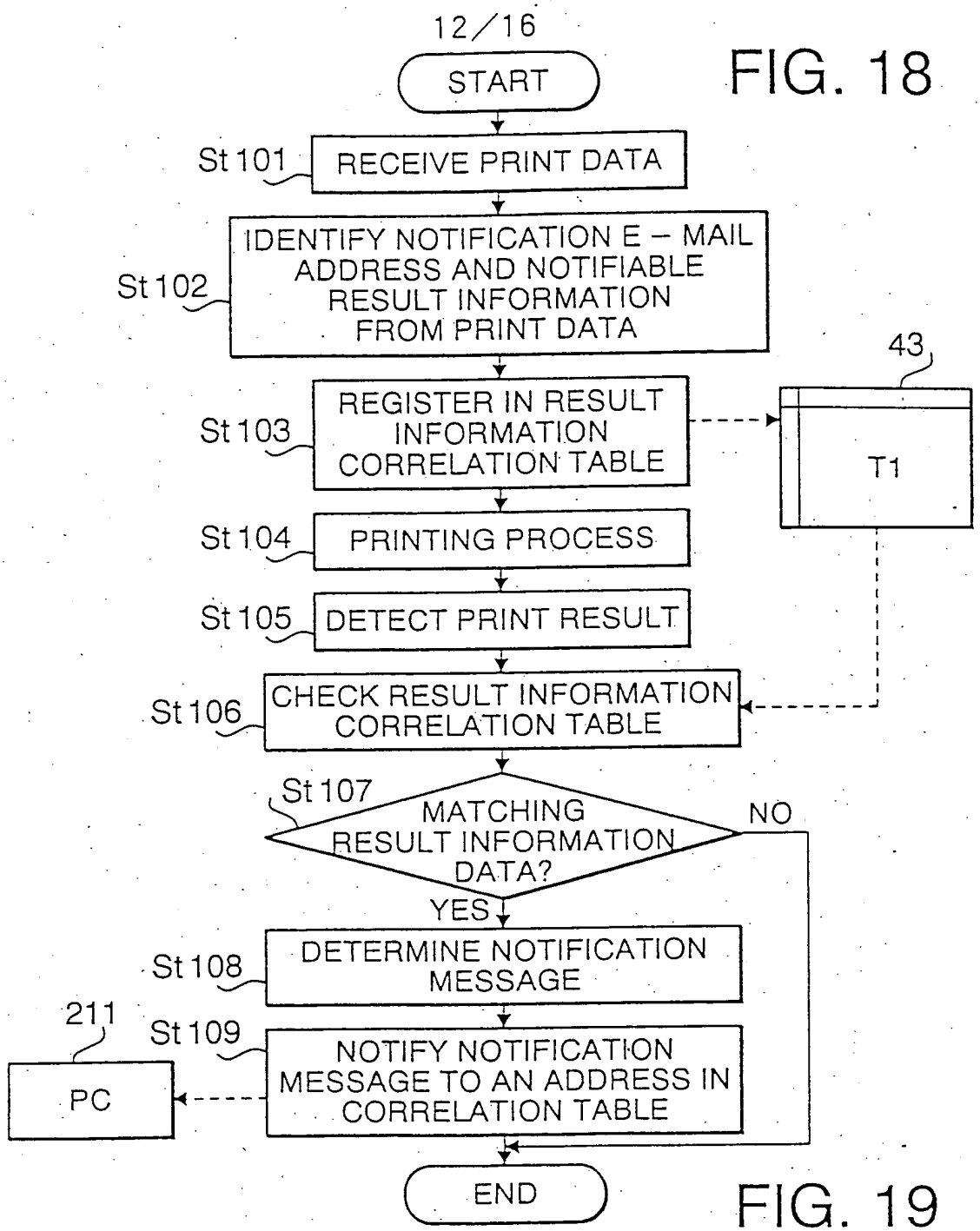


FIG. 19

NUMBERS	NOTIFICATION E – MAIL ADDRESSES	RESULT INFORMATION
1	123. 456. 789. 00	PAPER JAM COMMUNICATION ERROR NO PAPER
2	101. 202. 303. 44	NETWORK ABNORMAL QUEUED FOR PRINTING
⋮	⋮	⋮
n	n	

FIG. 20

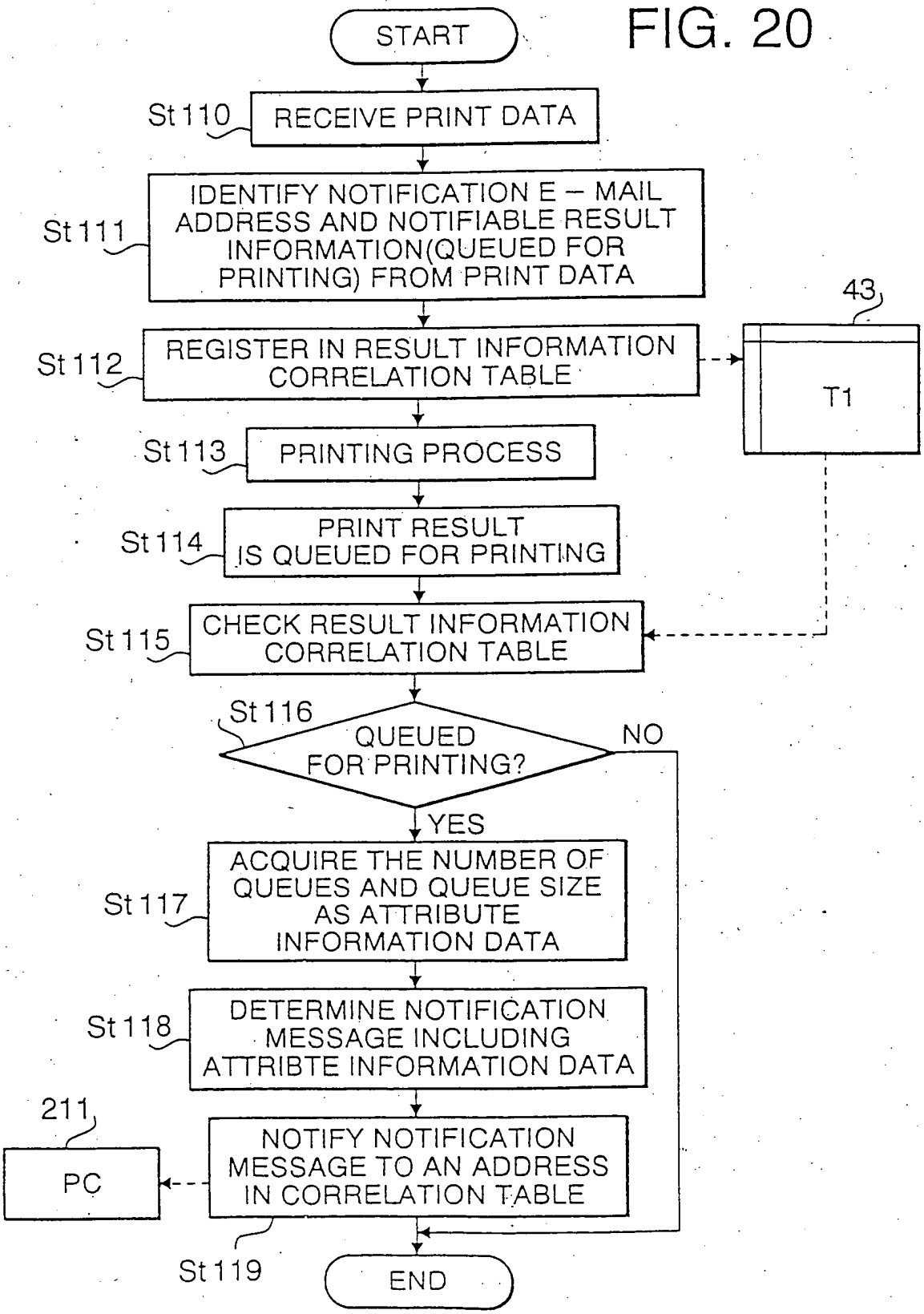

START
St110
RECEIVE PRINT DATA
St111
IDENTIFY NOTIFICATION E – MAIL ADDRESS AND NOTIFIABLE RESULT INFORMATION(QUEUED FOR PRINTING) FROM PRINT DATA
St112
REGISTER IN RESULT INFORMATION CORRELATION TABLE
43
T1
St113
PRINTING PROCESS
St114
PRINT RESULT IS QUEUED FOR PRINTING
St115
CHECK RESULT INFORMATION CORRELATION TABLE
St116
QUEUED FOR PRINTING?
NO
YES
St117
ACQUIRE THE NUMBER OF QUEUES AND QUEUE SIZE AS ATTRIBUTE INFORMATION DATA
St118
DETERMINE NOTIFICATION MESSAGE INCLUDING ATTRIBTE INFORMATION DATA
211
PC
NOTIFY NOTIFICATION MESSAGE TO AN ADDRESS IN CORRELATION TABLE
St119
END

FIG. 21

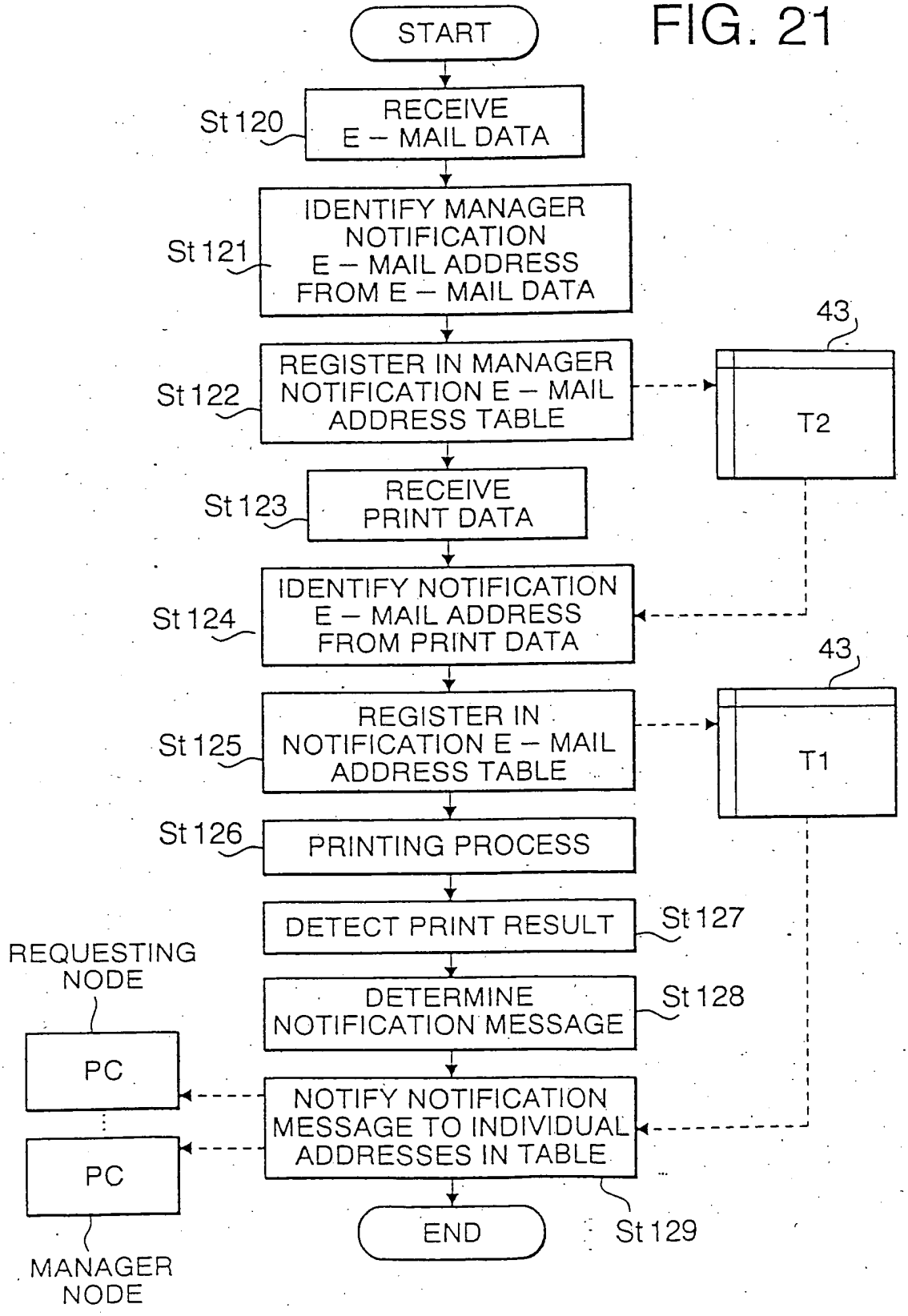

START
St 120
RECEIVE E – MAIL DATA
St 121
IDENTIFY MANAGER NOTIFICATION E – MAIL ADDRESS FROM E – MAIL DATA
St 122
REGISTER IN MANAGER NOTIFICATION E – MAIL ADDRESS TABLE
43
T2
St 123
RECEIVE PRINT DATA
St 124
IDENTIFY NOTIFICATION E – MAIL ADDRESS FROM PRINT DATA
43
St 125
REGISTER IN NOTIFICATION E – MAIL ADDRESS TABLE
T1
St 126
PRINTING PROCESS
DETECT PRINT RESULT
St 127
DETERMINE NOTIFICATION MESSAGE
St 128
NOTIFY NOTIFICATION MESSAGE TO INDIVIDUAL ADDRESSES IN TABLE
END
St 129
REQUESTING NODE
PC
PC
MANAGER NODE

FIG. 22

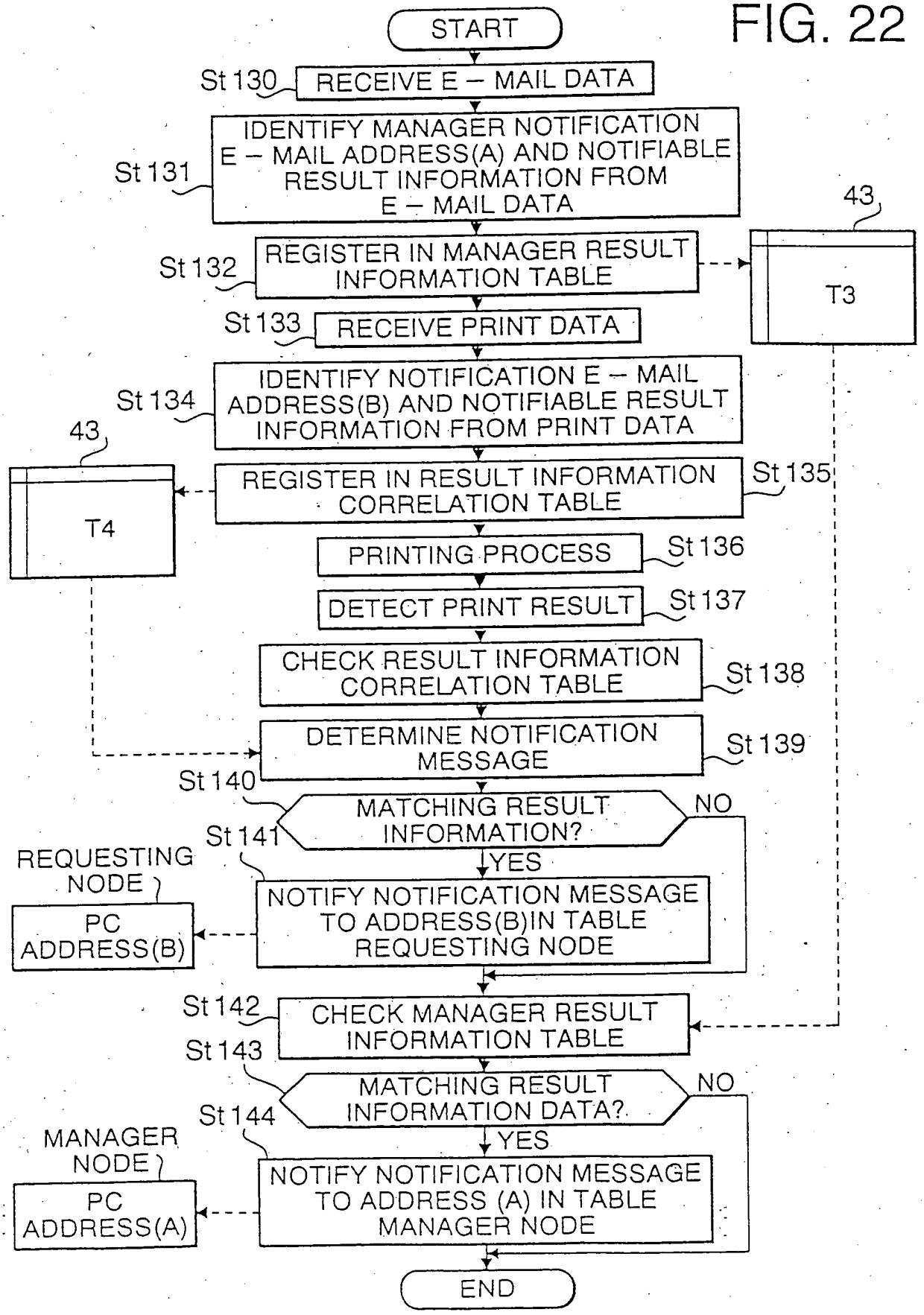

START
St 130
RECEIVE E – MAIL DATA
St 131
IDENTIFY MANAGER NOTIFICATION E – MAIL ADDRESS(A) AND NOTIFIABLE RESULT INFORMATION FROM E – MAIL DATA
St 132
REGISTER IN MANAGER RESULT INFORMATION TABLE
43
T3
St 133
RECEIVE PRINT DATA
St 134
IDENTIFY NOTIFICATION E – MAIL ADDRESS(B) AND NOTIFIABLE RESULT INFORMATION FROM PRINT DATA
43
T4
REGISTER IN RESULT INFORMATION CORRELATION TABLE
St 135
PRINTING PROCESS
St 136
DETECT PRINT RESULT
St 137
CHECK RESULT INFORMATION CORRELATION TABLE
St 138
DETERMINE NOTIFICATION MESSAGE
St 139
St 140
MATCHING RESULT INFORMATION?
NO
St 141
YES
REQUESTING NODE
PC ADDRESS(B)
NOTIFY NOTIFICATION MESSAGE TO ADDRESS(B)IN TABLE REQUESTING NODE
St 142
CHECK MANAGER RESULT INFORMATION TABLE
St 143
MATCHING RESULT INFORMATION DATA?
NO
St 144
YES
MANAGER NODE
PC ADDRESS(A)
NOTIFY NOTIFICATION MESSAGE TO ADDRESS (A) IN TABLE MANAGER NODE
END

FIG. 23

NUMBERS	MANAGER NOTIFICATION INFORMATION E – MAIL ADDRESSES	NOTIFIABLE RESULT
1	123. 456. 789. 00	PAPER JAM COMMUNICATION ERROR NO PAPER
2	101. 202. 303. 44	NETWORK ABNORMAL QUEUED FOR PRINTING
⋮	⋮	⋮
n	n	

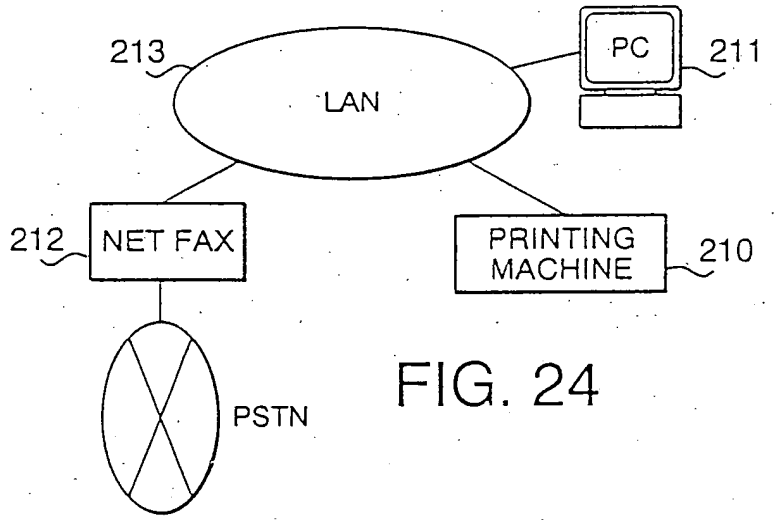


FIG. 24

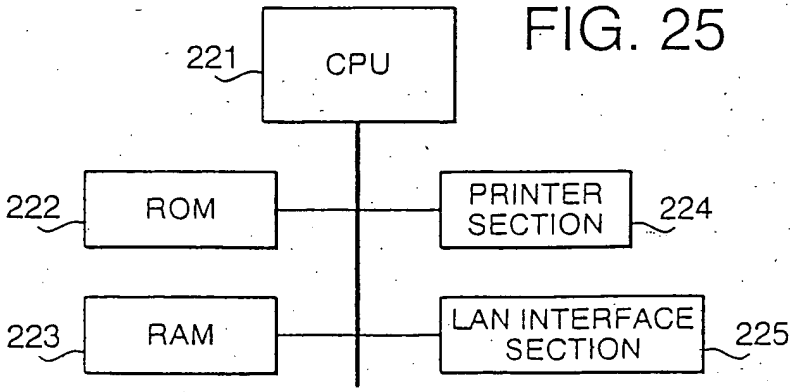


FIG. 25